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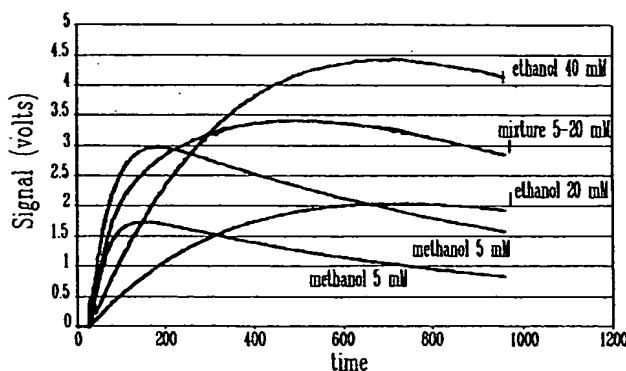
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(54) Title: AN ANALYZER FOR THE SIMULTANEOUS ENZYMATIC DETECTION OF CLOSELY RELATED ANALYTES

Examples of differential kinetic responses from alcohols



(57) Abstract: An analyzer and a method for simultaneously detecting and measuring the concentration of two related analytes, the analytes being substrates for a common enzyme. The analyzer comprises an enzymatic reaction monitoring component including a support base, a mixed electrode system consisting of a working electrode, an auxiliary electrode and a reference electrode, the mixed electrode system being supported by said support base, and an enzymatic reaction means incorporating the enzyme, the enzymatic reaction means being disposed on the mixed electrode system; whereby, when the enzymatic reaction means is placed in contact with a liquid sample containing the two related analytes, the two related analytes chemically react with the enzyme to produce an electronic signal directly related to the concentration of each of the two related analytes in said liquid sample; a detector including a sensor, the detector being connected to the enzymatic reaction monitoring component and capable of continuously detecting and amplifying said electronic signal to produce amplified signals; and a data processor capable of converting the amplified signals into numerical data representative of the concentration of each of the two related analytes.